Emailed questions from Dan Hirsh 2/10 - 4/18Lily forwarded all emails to Navy soon after receiving them.

From: Daniel Hirsch [mailto:dohirsch@ucsc.edu]

Sent: Monday, April 18, 2016 12:04 PM To: LEE, LILY < LEE.LILY @ EPA.GOV>

Cc: Walker, Stuart < Walker. Stuart@epa.gov>

Subject: Hunters Point info request

Hi Lily,

The Hunters Point documents we have been reviewing indicate a remediation level for radium-226 of 1 pCi/g above background, not to exceed 2 pCi/g, "per agreement with EPA." Could you send me documentation of that EPA agreement and its basis, and any risk assessment that was performed at the time of the risk associated with that level of radium? [Lily is looking in EPA files but has not yet found this. Could the Navy also search its files?] Also, I am having trouble locating the value being employed for radium background—could you let me know what value is being used and where I can find the source for it?

Additionally, I have not been able to locate anything in the links you sent me for the 5-Year reviews regarding EPA review of those reviews as to compliance with EPA CERCLA guidance for radionuclides, including consideration of changes to EPA PRGs. Could you direct me to such review if it took place? [Lily is looking in EPA files but has not yet found this. Could the Navy also search its files?]

Lastly, during our call last week Derek Robinson from the Navy offered to provide additional information on request. On the 13th I emailed him regarding questions and documents about the Tetra Tech matter. I haven't heard back. Given the upcoming meeting on Thursday, I very much would like to have that information now. If there is anything you can do to help facilitate getting a response from the Navy, I would appreciate it.

From: Daniel Hirsch [mailto:dohirsch@ucsc.edu]
Sent: Wednesday, March 30, 2016 4:41 PM

To: LEE, LILY <LEE.LILY@EPA.GOV>

**Cc:** Walker, Stuart < Walker.Stuart@epa.gov>; Janice Davis < jadadavi@ucsc.edu>; Lucien Martin < lumamart@ucsc.edu>; Maria Caine < mcaine@ucsc.edu>; Janie Flores < jalflore@ucsc.edu>; Liora Huebner < lhuebner@ucsc.edu>; Flora Lu < floralu@ucsc.edu>; bradley@greenaction.org

Subject: Re: Stuart Walker will join RE: request re conference call April 12

May I ask, in preparation for the call, if you could either provide me with copies, or direct me to links if they are posted on a website, for any 5-year reviews performed for portions of Hunters Point to ascertain the potential impact of revised EPA cleanup standards and guidance that may have come into being since cleanup planning and decisions and risk analyses were originally initiated? If the 5 year reviews were done by EPA, it would be helpful to see them. If they were done by the Navy, it would be helpful to be able to obtain them as well as any EPA reviews of the Navy analyses.

[Lily already sent links to 5 year reviews]

Also, if EPA has done any other reviews of how updated EPA guidance and standards and risk assessment methodologies might impact Hunters Point past cleanup actions, decisions, and risk analyses, it would be very helpful to see those as well.

From: Daniel Hirsch [mailto:dohirsch@ucsc.edu]

**Sent:** Sunday, March 20, 2016 7:57 PM **To:** LEE, LILY < LEE.LILY@EPA.GOV >

**Cc:** Walker, Stuart < Walker. Stuart@epa.gov>; Janice Davis < jadadavi@ucsc.edu>; Lucien Martin < lumamart@ucsc.edu>; Maria Caine < mcaine@ucsc.edu>; Janie Flores < jalflore@ucsc.edu>; Liora

Huebner <a href="https://linear.google.com">https://linear.google.com</a>; Flora Lu <a href="https://linear.google.com">floralu@ucsc.edu</a>; bradley@greenaction.org

Subject: request re conference call April 12

Hi Lily,

We would appreciate it if you would arrange for Stuart Walker, the EPA Superfund remedial program's National Radiation Expert, to participate in the conference call on Hunters Point issues scheduled for April 12.

We note that "Radiation Risk Assessment at CERCLA Sites Q&A," (EPA Office of Superfund Remediation and Technology Innovation Directive 9200.4-40, May 2014) states:

## "Q10. For CERCLA risk assessments at remedial sites, is it appropriate to use guidance or approaches developed by other Federal, State or Tribal Agencies or by International or National Organizations?

A. EPA has made the policy decision that risks from radionuclide exposures at remedial sites should be estimated in the same manner as chemical contaminants, which is consistent with EPA's remedial program implementing guidance (e.g., EPA 1997g, 1999d, 2000f). Consequently, approaches that do not follow the remedial program's policies and guidance should not be used at CERCLA remedial sites. Should regional staff have questions, they should consult with the Superfund remedial program's National Radiation Expert (Stuart Walker of OSRTI at the time this fact sheet was issued, at (703) 603-8748 or <a href="walker.stuart@epa.gov">walker.stuart@epa.gov</a>), before using guidance from other organizations that is not already incorporated into this and other EPA Superfund remedial program guidance."

Among the issues we wish to explore during the conference call is whether remediation standards, models, and other guidance were used at Hunters Point that are inconsistent with the EPA remedial program's policies and guidance. If so, we would like to understand whether EPA Region IX consulted with Mr. Walker before allowing use of guidance that is not incorporated in EPA Superfund remedial program guidance, and if so, on what basis the approvals were made. If there was no consultation with Mr. Walker, we would like to learn why not.

----Original Message-----

From: Daniel O Hirsch [mailto:dohirsch@ucsc.edu] Sent: Wednesday, February 10, 2016 3:14 PM

To: LEE, LILY < LEE.LILY@EPA.GOV>

Cc: bradley@greenaction.org; Marie Harrison <marieH@greenaction.org>

Subject: Re: setting up meeting or conference call with epa, navy, dtsc about shipyard environmental

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Lily,

Among the technical issues about which we have questions and for which it would be helpful to have your technical people available who can answer questions in those areas are:

- 1. How the remediation goals for radionuclides were derived.
- 2. How the risk estimates for specific estimated radiation doses were derived, and how those doses themselves were derived.
- 3. The standards that have been and are being used to declare materials to be or not be low-level radioactive waste and where these materials have been and are being sent for disposal or recycling.
- 4. Questions about pre- and post-remediation risk assessments for both chemicals and radionuclides.
- 5. Numerous questions about status of characterization, environmental impact review, and remediation for different portions of HPBV.
- 6. Availability of various key documents.

We have some general questions about the above subject areas, but also detailed specific technical questions